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www.secor.com
2655 Camino Del Rio N. Suite 302
San Diego, CA 92108
619-296-6195 TEL
619-296-6199 FAX

January 4, 2005

Project No. 08CH.51450.05

Ms. Marisue Crystal
County of San Diego
Land and Water Quality Division
P.O. Box 129261
San Diego, California 92112-9261

Subject: **Monitoring Well Destruction Report**
Chevron Service Station No. 9-1450
2432 Coronado Ave.
San Diego, CA

Reference: **Drilling Permit # LMON102774**
EST # H05723
APN #628-120-55-00

Dear Ms. Crystal:

On behalf of Chevron Environmental Management Company (Chevron), SECOR International Incorporated (SECOR) is submitting this report to summarize the results of monitoring well destruction activities completed at the subject site (Figure 1). A site plan showing the destroyed monitoring wells is presented as Figure 2. Well destruction activities were performed under a permit issued by the County of San Diego, Land and Water Quality Division (LWQD), Site Assessment and Mitigation Division (SAM). Well destruction activities were performed in accordance with the San Diego County well standards outlined in Appendix B of the *SAM Manual 2004*.

WELL DESTRUCTION ACTIVITIES UNDER PERMIT #LMON102774

On December 15, 2004 and December 30, 2004, under the supervision of a California Registered Civil Engineer, a SECOR field geologist observed the destruction of three on-site groundwater monitoring wells (MW-1, MW-2, and MW3) at the subject site. The monitoring wells were destroyed under permit #LMON102774, issued by the SAM on December 9, 2004 (Attachment 1).

Well destruction was conducted by West Hazmat Drilling, Inc. (West Hazmat) using both a mobile CME-75 drilling rig and a limited access rig equipped with 10-inch diameter hollow-stem augers. Each well casing was completely withdrawn from its borehole prior to over-drilling. The three boreholes were over-drilled to remove all original well construction and annular fill materials (Attachment 2). The three boreholes were backfilled with bentonite-grout slurry from 35 feet below ground surface (bgs), the bottom of the borehole, to 4 feet bgs. The bentonite-grout was pumped from the bottom of the borehole upward using a tremie pipe. Bentonite chips were poured into the borehole from 4 feet bgs to 3 feet bgs. Approximately five (5) 50-pound

bags of bentonite-grout and two (2) 50-pound bags of bentonite chips, to serve as an upper seal, were used in destroying each well. Each borehole was completed from the top of the bentonite chips to ground surface with approximately three feet of concrete. The concrete seal was completed with an outward slope to ensure proper surface runoff.

Drill cuttings for all well destruction activities consisted of bentonite sealing materials. Drill cuttings generated during the destruction activities were placed in 55-gallon drums that were properly labeled and temporarily stored on-site pending transport and disposal by Chevron-approved contractors. The well box and casing materials were disposed of by West Hazmat at a sanitary landfill. Additionally, the volume of bentonite-grout and bentonite chips used within the borings is provided in Table 1.

If you have any questions regarding the information provided in this report, please contact the undersigned at (619) 296-6195.

Sincerely,

SECOR International Incorporated

Prepared By:

Brian A. Waite
Project Geologist

Reviewed By:

Edward A. Kwasnica
Senior Project Manager

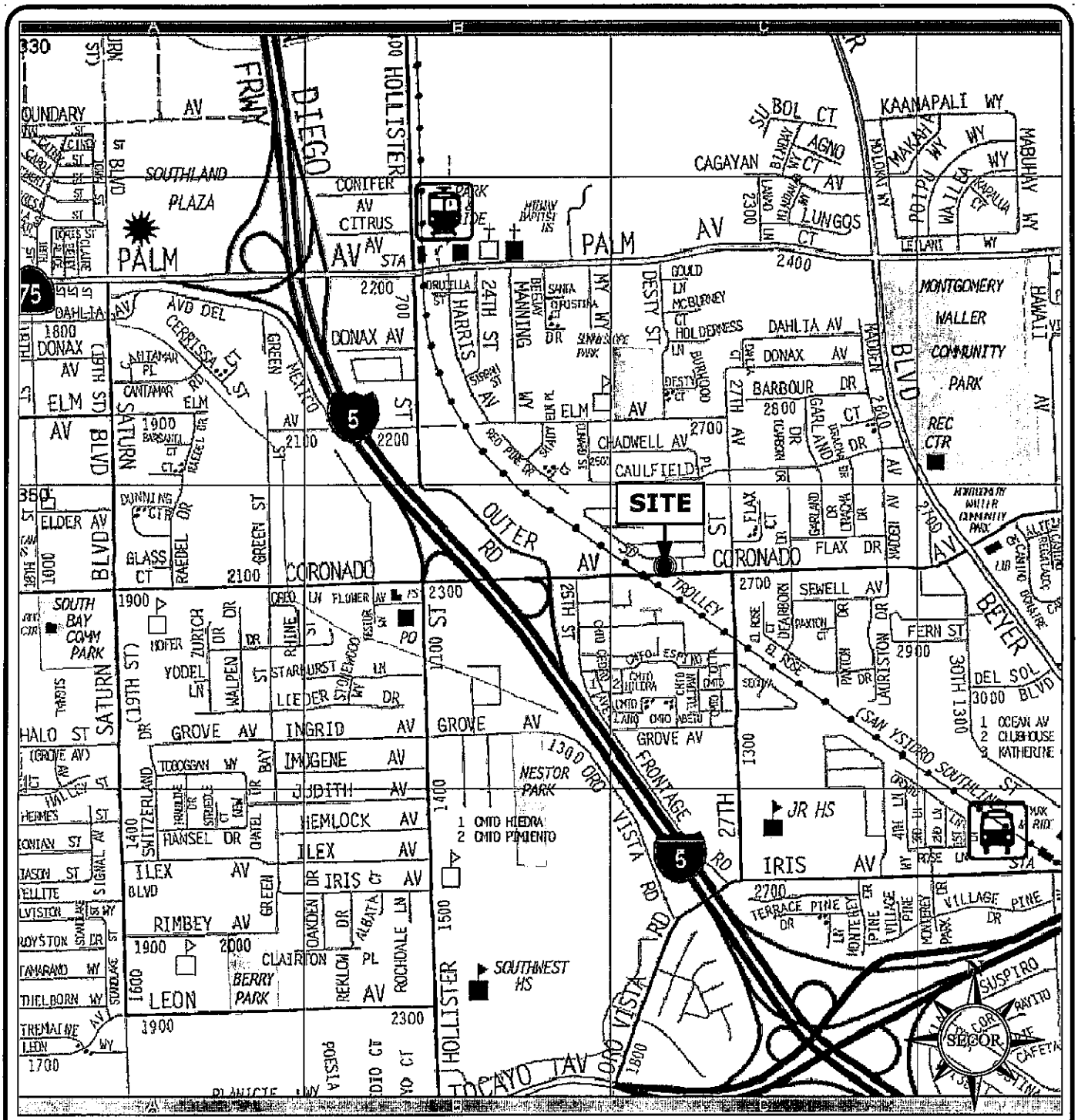
Approved By:

Neal S. Keller P.E. #C59525
Senior Engineer

Enclosure: Figure 1 - Site Location Map
Figure 2 - Site Plan (with destroyed monitoring well locations
Table 1 - Construction Materials for Monitoring Well Destructions
Attachment 1 – Well Destruction Permit Cover Sheet
Attachment 2 – Borehole/Well Logs (MW-1, MW-2, and MW-3)

cc: Mr. Eric Roehl, Chevron Environmental Management Company
Mr. Kent Huth, County of San Diego SAM Division

FIGURES



REFERENCE: THOMAS GUIDE CD-ROM, PAGE & GRID 1350 C1.

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International Incorporated
2655 CAMINO DEL RIO N., SUITE 302
SAN DIEGO, CA. 92108

k:\Allprojects2004dwgs\Chevron\91450\91450SLOC12-03.DWG

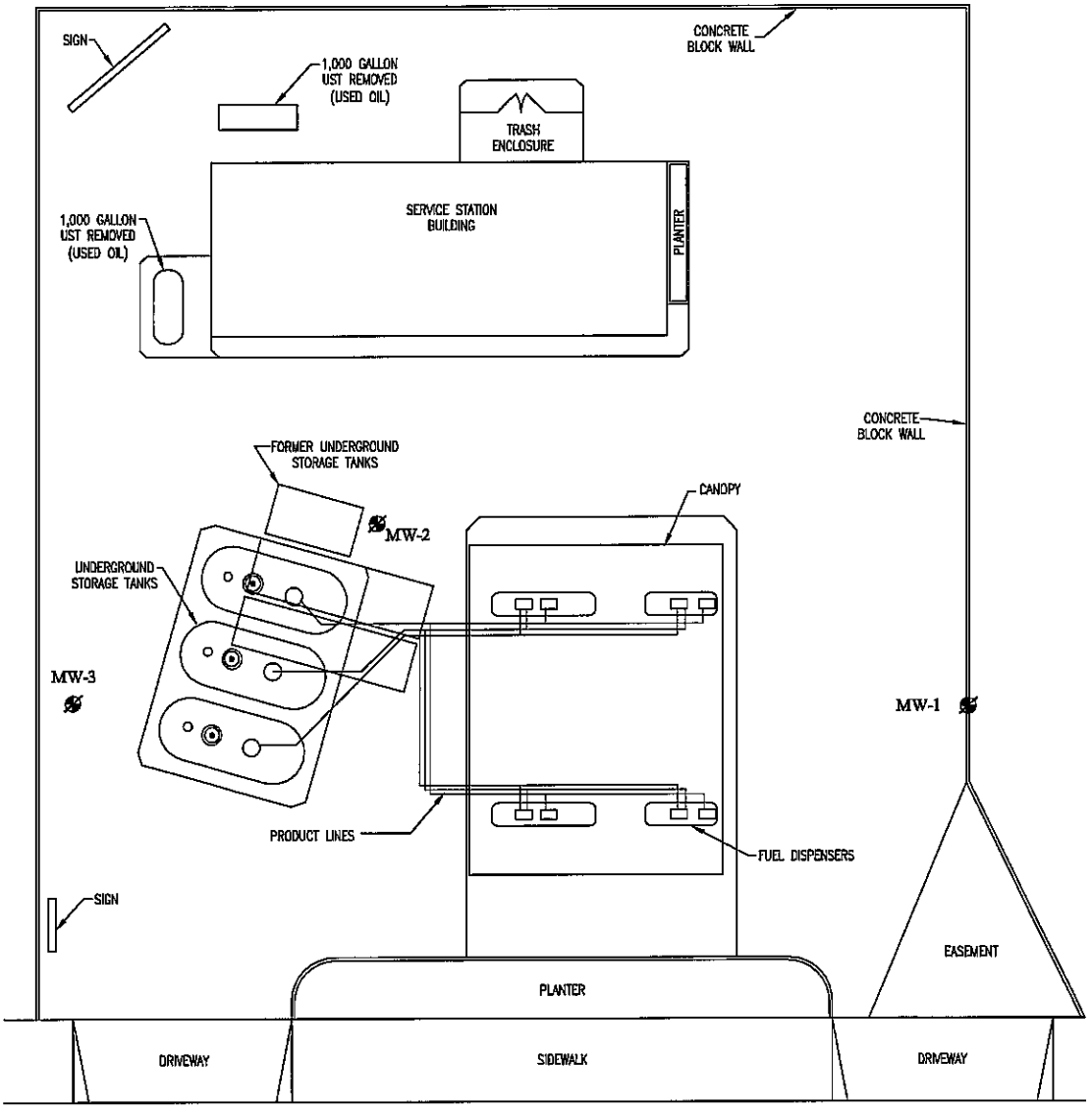
PROJECT: 08CH.41450.03 DATE: 01/28/04

NOTES:

FIGURE 1

SITE LOCATION MAP

CHEVRON STATION NO. 9-1450
2432 CORONADO AVE.
SAN DIEGO CA 92154



LEGEND

MW-8 **MONITORING WELL (DESTROYED)**

UST LOCATION

N

0 30 60

APPROXIMATE SCALE IN FEET

SECOR 2655 Camino del Rio North, Suite 302 San Diego, California 619-296-6195/Fax 619-296-6199	PREPARED FOR: CHEVRON ENVIRONMENTAL MANAGEMENT FACILITY #9-1450 2432 Coronado Avenue San Diego, California	**SITE PLAN**	FIGURE **2**
	JOB NUMBER: 06CH.51450.05 DRAWN BY: DW	CHECKED BY: BW APPROVED BY: NK	DATE: 01/03/05

P:\10CHEVRON\SITES\9-1450 CORONADO AVE., SD \FIGURES\91450SP1-05.DWG MODIFIED BY BWAITE ON JAN 04, 2005 - 8:44

91450SP 1-05.DWG

TABLE

Table 1

Construction Materials for Monitoring Well Destruction

Chevron Service Station 9-1450

Boring/Well Number	Overdrill Depth (ft bgs)	Bentonite-Grout (bags)*	Bentonite Chips (bags)*	Concrete(bags)**	Bentonite-Grout Fill (cubic feet)	Bentonite Chip Fill (cubic feet)	Concrete (cubic feet)
MW-1	35	5	2	5	17.5	1.31	3.5
MW-2	35	5	1	11	17.5	0.655	7.7
MW-3	35	5	1	11	17.5	0.655	7.7

Notes:

ft bgs	Feet below ground surface
*	50 pounds bag
**	70 pounds bags

ATTACHMENT 1

WELL DESTRUCTION PERMIT COVER SHEET

PERMIT #LMON102774
A.P.N. #628-120-55-00
EST #H05723

COUNTY OF SAN DIEGO
DEPARTMENT OF ENVIRONMENTAL HEALTH
LAND AND WATER QUALITY DIVISION

MONITORING WELL DESTRUCTION PERMIT

SITE NAME: CHEVRON SERVICE STATION

SITE ADDRESS: 2432 CORONADO AVENUE, SAN DIEGO, CA 92154

PERMIT TO: **DESTROY 3 GROUNDWATER MONITORING WELLS**

PERMIT APPROVAL DATE: December 9, 2004

PERMIT EXPIRES ON: April 8, 2005

RESPONSIBLE PARTY: CHEVRON ENVIRONMENTAL MANAGEMENT

PERMIT CONDITIONS:

1. **All material within the original borehole, which includes the casing, filterpack and annular seal must be removed. The borehole must be completely filled with an approved sealing material as specified in Department of Water Resources Bulletin 74-90.**

2. All water and soil resulting from the activities covered by this permit must be managed, stored and disposed of as specified in the SAM Manual in Section 5, E- 4. **(http://www.sdcounty.ca.gov/deh/lwq/sam/manual_guidelines.html).** In addition, drill cuttings must be properly handled and disposed in compliance with the Stormwater Best Management Practices of the local jurisdiction.

3. Within 60 days of completing work, submit a well construction report, including all well and/or boring logs and laboratory data to the Well Permit Desk. This report must include all items required by the SAM Manual, Section 5, Pages 6 & 7.

4. This office must be given 48-hour notice of any drilling activity on this site and advanced notification of drilling cancellation. Please contact the Well Permit Desk at 619) 338-2339.

NOTE: **This permit does not constitute approval of a work plan as defined in Section 2722 of Article 11 of C.C.R., Title 23. Work plans are required for all unauthorized release investigations in San Diego County.**

APPROVED BY: for [signature] DATE: 12/09/2004
VERONICA TAVIZON

NOTIFIED: 12-10-04 fax
V.M. AZ

ATTACHMENT 2

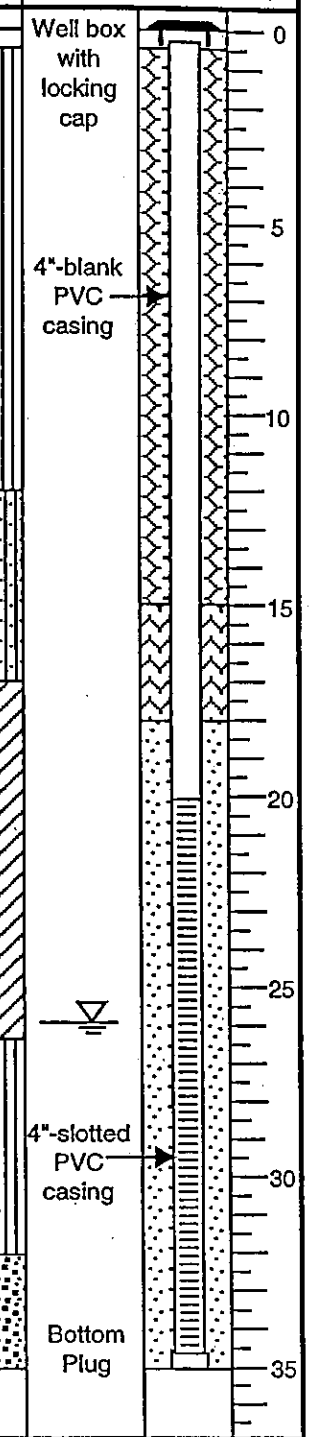
BOREHOLE/WELL LOGS (MW-1, MW-2, AND MW-3)

SAMPLE INTERVAL	SAMPLE DEPTH (fbg)	DESCRIPTION AND SOIL CLASSIFICATION	BLOWS PER 6 INCHES	PID (ppm)	USCS	GRAPHIC LOG
	0	CLIENT/PROJECT: Chevron Coronado #9-1450 LOCATION: 2432 Coronado Avenue San Diego, California 6" of asphalt Hand augered to a depth of 5 fbg				
	5	SILT: brown, moist, hard, no plasticity trace clay, no odor	12,22,34	0	ML	
	10	GRAVELY SILT: light brown, moist, hard, no plasticity, no odor	13,19,30	0		
	15	SILTY SAND: brown, rust staining, moist, medium dense, no odor	6,10,15	0	SM	
	20	CLAY: brown, moist, very stiff, medium to high plasticity, no odor	5,7,10	0	CL	
	25	SILTY CLAY: brown, moist/wet, stiff, low to medium plasticity, no odor	4,6,7	0		
	30	SANDY SILT: brown, wet, very stiff, no to low plasticity, no odor	9,11,13	0	ML	
	35	SAND: gray, wet, medium dense, medium- to coarse-grained sand, no odor	7,8,10	0	SW	

BOREHOLE COMPLETION DETAIL

☒ WELL ☒ GW ☐ VW

☐ BORING ☐ SPARGE POINT



DRILLING METHOD: 10-inch O.D. Hollow Stem Auger

SAMPLER/SAMPLE TYPE: California-Modified Split Spoon

TOTAL BORING DEPTH: 35 fbg

DEPTH TO WATER: 25 fbg

DATE DRILLED: January 9, 1995

LOGGED BY: D. Pessler

APPROVED BY: J. Haslett, R.G. # 5641

DRILLED BY: Drill Line, Inc.

HOLGUIN, FAHAN & ASSOCIATES, INC.

LOG OF EXPLORATORY BORING

MW-1

SAMPLE INTERVAL	DEPTH (fbg)	CLIENT/PROJECT: Chevron Coronado #9-1450 LOCATION: 2432 Coronado Avenue San Diego, California DESCRIPTION AND SOIL CLASSIFICATION	BLOWS PER 6 INCHES	PID (ppm)	USCS	GRAPHIC LOG	BOREHOLE COMPLETION DETAIL
	0	6" of asphalt Hand augered to a depth of 5 fbg					Well box with locking cap
	5	CLAYEY SILT: reddish brown, moist, hard, low t medium plasticity, no odor	11,17,19	0	ML		4"-blank PVC casing
	10	SILT: light brown, moist, hard, no to low plasticity, no odor	10,18,20	0			
	15	SILTY SAND: light brown, moist, very dense, no odor	13,20,30	0	SM		
	20	SILTY CLAY: light brown, rust stringers, moist, very stiff, medium plasticity, no odor	10,10,15	0	CL		
	25	moist/wet, stiff	4,5,7	0			▽
	30	SAND: gray, wet, dense, medium- to coarse-grained, no odor	11,15,25	0	SW		4"-slotted PVC casing
	35	very dense	20,25,30	0			Bottom Plug

BOREHOLE COMPLETION DETAIL: ☒ WELL ☒ GW ☐ VW ☐ BORING ☐ SPARGE POINT

DRILLING METHOD: 10-inch O.D. Hollow Stem Auger	DATE DRILLED: January 9, 1995
SAMPLER/SAMPLE TYPE: California-Modified Split Spoon	LOGGED BY: D. Pessler
TOTAL BORING DEPTH: 35 fbg	APPROVED BY: J. Haslett, R.G. # 5641
DEPTH TO WATER: 25 fbg	DRILLED BY: Drill Line, Inc.

HOLGUIN, FAHAN & ASSOCIATES, INC.

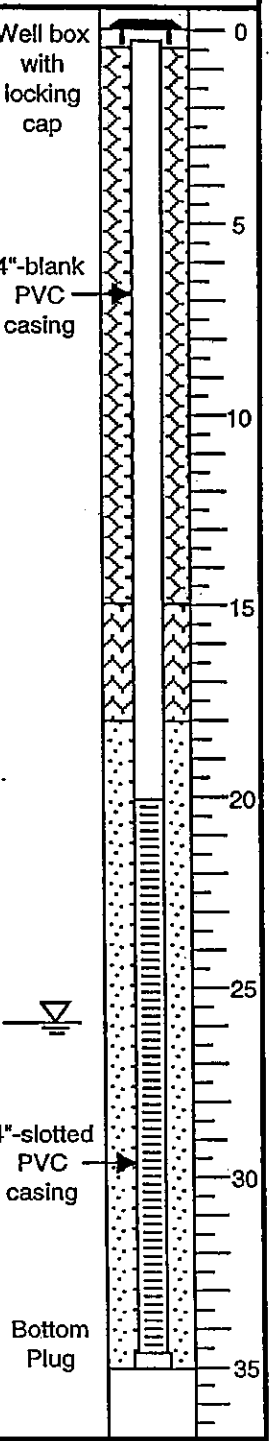
LOG OF EXPLORATORY BORING

MW-2
Page 1 of 1

CLIENT/PROJECT: Chevron Coronado #9-1450
LOCATION: 2432 Coronado Avenue
San Diego, California

SAMPLE INTERVAL	DEPTH (fbg)	DESCRIPTION AND SOIL CLASSIFICATION	BLOWS PER 6 INCHES	PID (ppm)	USCS	GRAPHIC LOG
	0	6" of asphalt				
		Hand augered to a depth of 5 fbg				
	5	CLAYEY SILT: reddish brown, moist, hard, no to low plasticity, no odor	10,12,20	0	ML	
	10	SANDY SILT: brown, moist, very stiff, no plasticity, no odor	7,8,11	0		
	15	SAND: light brown, moist, medium dense, medium- to coarse-grained	8,12,17	0	SW	
	20	dense	18,20,25	0		
	25	SILTY CLAY: brown with rust stringers, moist, very stiff, medium plasticity, no odor	7,10,13	0	CL	
	30	SANDY SILT: brown with red stringers, wet, hard, no odor	10,15,30	0	ML	
	35	SAND: gray, wet, medium dense, medium- to coarse-grained, no odor	3,5,7	0	SW	

BOREHOLE COMPLETION DETAIL
☒ WELL ☒ GW ☐ VW
☐ BORING ☐ SPARGE POINT



DRILLING METHOD: 10-inch O.D. Hollow Stem Auger
SAMPLER/SAMPLE TYPE: California-Modified Split Spoon
TOTAL BORING DEPTH: 35 fbg
DEPTH TO WATER: 25 fbg

DATE DRILLED: January 9, 1995
LOGGED BY: D. Pessler
APPROVED BY: J. Haslett, R.G. # 5641
DRILLED BY: Drill Line, Inc.

HOLGUIN, FAHAN & ASSOCIATES, INC.

LOG OF EXPLORATORY BORING

MW-3